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MANITOBA ENVIRONMENTAL COUNCIL

Manitoba

ANNUAL REPORT
16:1988

MANITOBA ENVIRONMENTAL COUNCIL

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MANITOBA ENVIRONMENTAL COUNCIL
Box 17
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May 7, 1989

The Honourable Glen Cummings
Minister of Environment
Room 344 Legislative Building
450 Broadway Avenue
Winnipeg, Manitoba
R3C 0V8

Dear Mr. Cummings:

I have the honor to present herewith Annual Report 16:1988 of the Manitoba Environmental Council.

This report details the Council's activities during the fiscal year ending March 31, 1988, and includes information regarding the Annual Meeting of May 14, 1988.

Yours sincerely,

I. Rollo

Dr. I. Rollo
Chair

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Report of the Chair, Dr. Ian Rollo

Welcome to the Annual General Meeting of the Manitoba Environmental Council. It is particularly pleasant to see such a good turn out, the more so since the environment outside entices us to take a walk in the park, turn over the back yard, open up the cottage, instead of sitting like this. Thank you very much for coming. It is all the more pleasant since I'm sure most of us realize that we are ethereal beings not really here. With the enactment of Bill 26, the Environment Act, more than a month ago, the Minister has to appoint members to a new Manitoba Environmental Council and appoint its Chairperson. This obviously has not yet occurred. In consultation with Dr. Owen, the Deputy Minister, we have agreed to carry on as in the past until such time as a new Council emerges phoenix-like from the ashes of the old.

For those of us active on the Board it has been obvious that over the past year or so, Council has been much less active compared to its heyday in the past. There are likely many reasons for this; possibly decreasing interest in the public in general, a sense of maturation in the mind of environmental groups and a decrease in their activities, a diffusion of Council's focus, less dedication on the part of members - many different reasons. Certainly the apparent death blow to Council in the first draft of the new act was most discouraging. Fortunately our fears for Council's future have been shown to be groundless. We can now look forward under our new mandate to an increasing potential for those environmental activities developed and expanded over the 16 years since Council was first founded.

Over the past year, however, the Council has not been completely moribund, activities on behalf of outside concerns that come to mind are the discussion with consultants for the development of the Charleswood Corridor and opponents of the scheme, representation of residents of Portage la Prairie concerning disposition of municipal waste, a position on the biological control of cankerworm, and so on. Activities of the several Technical Committees will be reported on later in this meeting. An extensive brief was prepared by an ad hoc committee of four members and submitted to the Science Council of Canada on Environmental Implications of Science and Technology for the National Report on Science and Technology. This was Chaired by Dr. Diane Malley, your past Chairperson. Pervading much of Board's time, however, has been a discussion of where it feels Council should be heading and how it intends to get there. Based on much conversation among ourselves and with senior members of Departmental staff, we now feel we have many of the answers. Our mandate shall in general be to provide advice and recommendations to the Minister on environmental matters, promote environmental awareness and provide assistance on the development . and presentation of environmental education programs. In particular, environmental matters which are addressed by Council may result from specific requests from the Minister; requests by the Clean Environment Commission (our relationship with the Clean Environment Commission is elaborated in the new Act, something that has never been described before); expressed concerns of the general public, (something that we've always been concerned ourselves with); and very importantly, specific concerns of the Council itself. We therefore have input from all directions within the Province and we expect, and indeed welcome the opportunity, to respond. In addition, Council should interact in an as yet undefined way with the National Task Force and the Conservation Strategy Association of Manitoba. We will be hearing more about both of those organizations later on in this meeting.

The Department also envisages that since, under the Act, its mandate is now more regulatory and enforcing, the Council may concern itself with some of the service components undertaken under the old Act. This is yet to be explored and discussed. Any significant shifting of load, however, will entail increased staffing of Council. Council staff is already overworked. Indeed in past there is, and I am sure Keri can speak to this, considerable time and effort

devoted to responding to phone inquiries from the general public.

You may recall from previous meetings the concern by many that more and more, as a consequence of fiscal restraint, rural participation was declining. This was unfortunate since much active participation and valuable contributions were made by those members. We hope at least in part to overcome this by identifying four major regions. These are to be, Northern, to include The Pas, Thompson and Churchill, Southern, to include the Interlake, Winnipeg, and Pembina Valley, Western to include Brandon, Parkland and Central Plains, and Eastern to include Beausejour and Lac du Bonnet. We anticipate requesting additional funds to allow attendance by a member from each region to attend meetings. Hopefully funds will become available to allow representatives to attend more meetings than they do now. Participation from the Northern Regions is most costly. Representation from the north will be discussed later in the agenda. Additional funds will also be requested to allow Council representation at that valuable meetings, the Annual Meeting of the Canadian Environmental Advisory Council. Through lack of funds we are unable to attend in October 1987.

We are also cognizant that effective implementation and maintenance of our place within the new Act will depend a lot on improving communication with our close colleagues. This can be promoted by meeting between the Environmental Council and the Minister and/or his staff, the Director as defined under the new Act, and very importantly, the Clean Environment Commission.

The Council's policies and priorities will be discussed annually at the first fall meeting, the so called "All-Technical Committees" meeting, and it's forthcoming year's program established. These priorities and policies should form the first communication on programs with the Minister and establish a firm basis for discussing Council's budget. Thereafter Council's business will be taken care of by what we hope will be a tighter knit team of individuals whose energies and commitment have been identified by past participation, either in Council, or in some other related activity or endeavour. With your help we ought to become a force noted for its expertise and influence, and a credit to the Department of which by the new Act we have become a legal entity. In concluding, I would like to thank very much indeed the other members of the Executive and the members of the Board who have made the running of Council business such a pleasant experience over the past year. Thank you, Ladies and Gentlemen.

REPORT OF THE VICE-CHAIR, Herold Driedger

Usually this report takes the form of a reflection of the year's events and is read at the Annual Meeting. This report will follow custom in so far as reflecting on the past, but diverges from custom in the presentation, for which I tender my apologies.

Events beyond my control precipitated me into a very demanding forum at the very time the Council's AGM took place. I was unable to prepare this report for that meeting. What I am writing now, a year later, will be truly reflective.

The activities of the Council for 1987/88 took place in a time of even greater fiscal restraint than the year before. The new environmental legislation tabled in the spring of 1987 reflected a positive consideration of many of our concerns. In fact, it was gratifying to see the efforts of the previous Board and Council recognized. But the effects of this legislation, particularly in requiring the MEC to assist in the definition of its changed role under the new Act called for major efforts on the part of executive members and regional directors without the benefits of the much needed advice and guidance of most of our rural members. Each notice of meeting for Board meetings ended with the sobering admonition that travel expenses would have to be paid out of the member's own pocket.

This lack of resources and the need to come to grips with the effect that the new environmental legislation would have on the MEC resulted in meetings devoted to much introspection and rationalization.

The move from our old headquarters in the Fort Osborne complex on Tuxedo, to the new shared quarters with the Clean Environment Commission, indicative of some of the changes to come were sobering and even traumatic. The Council had evolved over the many years into a fairly independent watchdog, advocating strongly for positive environmental behaviour by government, business, and the body politic. It may even have on occasion, exceeded its mandate in its zeal. The new Act, the new quarters, the soon to be revealed new regulations all combined to make the deliberations on our future role at times hesitant, many times defensive, but on the whole forward thinking and positive. For this I am truly grateful for the tolerance the individuals on the Executive showed towards each other when the discussion became somewhat heated.

One of our initiatives was the formation of a group of concerned citizens out of which, properly constituted and mandated, emerged what is now the Conservation Strategy Association of Manitoba. I am pleased that I was able to be in on the developmental stage of the Association. It was essential that such an Association be developed, particularly since the National Task Force on Environment and Economy had stressed the need for provincial conservation strategies which were to work in conjunction with the proposed Round Tables. It was felt that the MEC, under the new Act,would not be able to fulfil this role.

Readers of this report will by now understand that the type of work described above could be done by Council members who lived in and immediately around the city. What the report cannot convey is the sense of frustration felt at each meeting because we missed the input of those members who kept our perspectives broadly based - our rural and northern representatives.

The year ended with many changes. Keri Barringer made the decision to pursue her educational goal full time. It was decided that I pursue a different career path, and so I tendered my resignation from the MEC. The old MEC was phased out with the introduction of the new environmental Act in April of 1988, and a new MEC was born.

It was an honour to be of service and to serve with so many good people.

REPORT OF PAST CHAIR, Diane Melley

My activities as Past Chair since May 1987 began with leading an MEC northern tour with 12 participants from 22-28 June 1987.

The purpose of the trip was to have MEC members experience northern Manitoba environments and to discuss the concept of the provincial conservation strategy (PCS) with northern residents. We visited Grand Rapids, Thompson, Gillam and Churchill for meetings with native bands, provincial resource biologists, union and industry representatives, municipal representatives and private citizens. Highlights also included a tour of the Limestone Generating Station construction site near Gillam, tours of the Churchill area including the Churchill Northern Studies Centre and the Institute of Arctic Ecophysiology, a visit to Inco's open pit mine and tailings facility at Thompson, and attending the opening of the Gillam-Churchill power line in Churchill. A publication is planned based on briefs heard during the northern tour.

I represented the MEC at a reception on 4 October 1987 which preceded an Energy Options workshop held by the Department of Energy, Mines and Resources in Winnipeg 5-6 October 1987. Later in October, I represented the MEC and the Society of Canadian Limnologists at the Science Council of Canada workshop on "Water Policy: Toward the Year 2020". The workshop was held in Regina, 29-30 October 1987. On 20 November 1987 I participated in a Parks Canada forum for the purpose of

briefing Winnipeg-based Department of Environment employees on the World Conservation Strategy, the National Task Force on Environment and Economy and on how they can become involved in these processes. M. Stefanson spoke on the National Task Force, H. Gavin on the Manitoba PCS and I spoke on the role of the MEC in the development of the Manitoba PCS and on the 23 May 1987 organizational meeting called by the MEC. I also critiqued the Task Force report, particularly for the lack of emphasis on ecosystems science, and reported on events at the United Nations on 19-20 October 1987 when Mme. Gro Harlem Brundtland presented the report of the World Commission on Environment and presented the report of the World Commission on Environment and Development, "Our Common Future" to the U.N. General Assembly.

I chaired or participated in five meetings of the ad hoc committee on the Manitoba PCS and together with P. Watts drafted a general position paper on the Manitoba PCS and the role of the emerging non-governmental organization in it.

This organization came about on 16 January 1988 and my activities as Past Chair since then have been primarily directed towards the PCS.

On 16 January 1988, the participants of the 23 May 1987 PCS organizational meeting and others interested convened to establish a new organization, the Conservation Strategy Association of Manitoba (CSAM). Interim bylaws were adopted and an executive board elected. The Board consists of: Chair, Hamish Gavin; Vice-Chair, Nick Carter; Secretary-Treasurer, Bill Goddard; Program Chair, Diane Malley; Incorporation Chair, Brian Pannell; Membership and Fundraising Chair, Hamish Gavin; and Ken Ogilvie, Ken Emberley, Wayne Neily and Rick Howard. Membership fees were set at $15.00 regular and $5.00 for students. It was intended that the organization operate with interim bylaws and the interim Board until the organization is incorporated.

Activities of CSAM have included writing the Environmental Control Division on 23 March 1988 concerning the application by CN Railways for approval to use hericides for weed and brush control on rights-of-way and other CN properties in Northern Manitoba.

On 4 April 1988, CSAM addressed a questionnaire on the World Conservation Strategy, the Brundtland Commission, the provincial conservation strategy and environmental problems in Manitoba to all major party candidates in the 26 April provincial election. A report of results is available from the MEC office. The results were summarized by Val Werier in his Winnipeg Free Press column on 30 April 1988.

The first workshop organized by CSAM was held on 24 April 1988 at the Wildwood Park Community Centre. The workshop topic was "Ecological Constraints to Sustainability: An Examination of Genetic Diversity". Dr. Jack Vallentyne, Senior Scientist, Department of Fisheries and Oceans, Canada Centre for Inland Waters, Burlington, and Ken Ogilvie of the Planning and Policy Branch, Department of Environment and Workplace Safety and Health were resource people. Sixteen people attended. Discussions ranged from technical matters of genetic diversity, to process matters such as education, to the structure of the relationships within government and between government and the public sector in the formation of the Manitoba Conservation Strategy. A report is in preparation.

At its Annual Meeting of 29 May 1987 the MEC voted to associate with the ad hoc committee working toward the PCS. The support by the MEC for the activities of the ad hoc committee and the resulting CSAM is gratefully acknowledged. The logistical support from the MEC office in calling meetings, in communications and as a temporary address for the receipt of mail have made possible the activities of CSAM to date. The efforts of Keri Barringer and

her continuing interest and enthusiasm for CSAM activities are particularly acknowledged.

On 9 February 1988 the MEC sent a 16 page submission on Environmental Implications of Science and Technology to the Science Council of Canada as input for its National Report on Science and Technology. This document was prepared by E. Pip, B. Pruitt, B. Turnock and I, with input from several scientists in the Freshwater Institute.

At the end of another year of association with the Council, I find my feelings of confidence in the Council only grows. It is a unique environmental council in Canada sitting between the government and the community, drawing on a wide scientific community through technical advisors and being able to synthesize a range of viewpoints from various parts of Manitoba and sectors of society in the formulation of its environmental advice to the Minister. I look forward to the adoption of the revised bylaws today and to functioning under them now as a Council embodied in legislation.

REPORT OF THE COORDINATOR,
Keri Barringer

All of MEC's 1987/88 budget was expended. Although overspending was strictly controlled this year, the Environment Department did cover approximately $150 in bills that the Council was unable to pay (including some MTS long distance charges and award certificates to Keewatin Community College - Natural Resources Management Technology Course).

The Department also covered, until the beginning of the new year, April 1, 1988, all expenses incurred by MEC due to the move from Building 2 to our current location at 500 Portage Ave. These expenses included the purchase of a Wang Word Processor Work Station. $900 was received to pay for mailing costs, an expense which was not formerly charged to MEC.

Council should also be aware that, as a result of the move, approximately $2400 additional expenses will be incurred in 88/89 for photocopying and word processing.

The expenditures for the 1987/88 fiscal year are summarized as follows:

MANITOBA ENVIRONMENTAL COUNCIL
EXPENDITURES
1987/88 FISCAL YEAR

TOTAL BUDGET	$12,900	
TOTAL EXPENDED	12,900	
REMAINING		
TRAVEL		$4,400
HOTELS/MEALS		3,000
OPERATING SUPPLIES		3,200
MTS		1,850
COMPUTER/PUBLICATIONS		450
TOTAL		$12,900

Submitted May 14, 1988

REGIONAL REPORTS

CENTRAL PLAINS

The R.M. of Portage la Prairie has been experiencing numerous problems with their sewage lagoons. Some of these have now been closed while others are being upgraded to meet current environmental standards.

Chemical containers are presently being crushed at many of the municipal dumps in the Central Plains region. Concerns have been expressed as to how best to dispose of plastic containers. There is some question as to whether burning is an acceptable treatment.

Soil erosion has been a severe problem throughout the region, particularly this past spring. A more intensive tree planting program is foreseen as a partial solution to this problem in the future.

(Presented by Betty Pawlicki)
Jim Knight, Representative.

WINNIPEG

There is concern that the area of Omands Creek which runs between the Velodrome and Portage Avenue has not yet been officially designated as a park. The citizens of the area are afraid that they are going to have to fight a highrise development in the area. The office has a recent publication on the Wildlife of Omand's Creek. It's quite amazing to see how much wildlife is contained in that wee area in the heart of the city right beside the stadium and the shopping mall.

In the past I have perceived my role as Representative of the Winnipeg Region as being one of support to the rural members who are out there where the environment is really happening. The Winnipeg area is but a small portion of the problem, even though we have the largest population. The rural representatives are out there, they know what's going on. Receipt of a letter, a telephone conversation, or someone passing on a message, are not as effective as having someone who has seen what is happening and can describe the situation to Council in person. Therefore, this is my annual pitch to keep pushing for funds to bring our rural members in. Their contribution is very important.

We do not want to have a Winnipeg Environmental Council, we want to have a Manitoba Environmental Council.

Betty Pawlicki, Representative

EASTERN

Thank you very much Mr. Chairman. Fifty years ago Bliss Carmen said "Man shapes his environment, then his environment shapes him." I wonder what we may become? All living things are moulded by the conditions and surroundings in which they live. In spite of the Law of Entropy, species evolve to adapt to their environment and because of that same Law of Entropy, the environment is largely what the users make it or, more correctly, what the users leave it to subsist with.

The concern expressed here centers on the land use policies currently practiced. The problem is seen this year in the ditches full of top-soil, the dry wells, the clouds of dust causing magnificent and heart-breaking sunsets. In Manitoba, agriculture is our number one industry. If it were any other industry there would be regulations on the use of the resource, placing the onus on the user to practice THE PROFESSION diligently. Even the provisions of The Fire Preventions Act, and similar ones in the Criminal Code, are not implemented regarding fires which get out of a farmer's control into forested areas. Not even The Environment Act's provisions are, as yet, perceived as a mechanism to control these situations. According to the active farm groups which I have spoken with, the onus must be placed squarely upon the abuser. These sentiments express an attitude of change; the environment and the economics cannot put up with what is happening any longer. Farmers will have to change their practices to survive.

I have several related points to cover. Soil conservation is not a topic on every second page of the city papers as it is in our rural ones. Nor is it on the coffee break and barber shop conversation list. At this time there is a $70 million federal-provincial program referred to as the Land Diversification Program. The other Prairie Provinces are actively implementating various schemes to restore the land base, but to date, no-one in the Department of Agriculture with whom I have spoken will admit that they even know about it, let alone what they would like to do with it, or are even interested in it. What the policy means, simply, is that the land that we have incorporated into our land base can be restored to what it's best use should be. There is presently a tremendous amount of such land.

In conjunction with this, over the past decade, I have acquired a rather extensive resource library on peat (the organic soil base) land practices. The recent world-wide conference should provide an update which would be invaluable if the proceedings were available. There are many instances of

current inappropriate utilization of these peat lands, with resultant decrease in water table, occurring in the Eastern region of Manitoba.

It is encouraging to observe a shift in the government's policy toward restricting further development of this land until a great deal more is known about its capabilities and its problems. It has been my contention since 1979 that these precious resources, acting as a transition zone between forest and farm, have to be protected until we have figured out what best should be done with them. Just leaving a couple of million acres alone is one of the more responsible alternatives. Unless there is some solid support and advocacy in this regard, the bogs of peat cover will go the way of the prairie pot-holes and for the same economic reasons. We have probably 18 major bogs in that category which have major significance to our water table and the ecosystem as a whole.

There is good news on the farm chemicals front as more and more users of fungicides and pesticides flush the containers properly and dispose of them at designated depots. Five years ago, when the depots opened, it seemed an insurmountable problem to get the farmers to cooperate. Now it is beginning to work.

There is an even more positive report. The peat fires that plagued us in the past now come under the effective control of a cooperating effort between Natural Resources fire teams and the private sector peat farmers. The farmers who have learned the hard way since the late 1940s how to handle these smoldering disasters. They work together on both private and crown lands. Numbering about 30, the "Swamp Crew" has been fantastic all winter in extinguishing fires and sharing accumulated knowledge with young farmers. Our MLA has responded by encouraging a Peat Fire Council to address all future problems. We look forward to the recommendations of the Clean Environment Commission on the peat fires with the hope that they can be implemented expeditiously for everyone's sake.

My final point is on rural residential subdivisions. An estimated 140 million dollars is the last annual production according to Bruce McLean of Manitoba Agriculture's Dugald soil conservation office. It is also his estimate that eighty percent of the subdivisions occur in the Eastern Region. Much of this is permitted because of the unique wording in the municipal bylaws which circumvent the words and the intent of the Planning Act. This is one specific area where Council could document the problem and provide the evidence which would motivate some other environmental groups to launch an action to halt the travesty of continuing abuse on high quality soils. The government, to date, has refused to move on this in spite of the fact that the Attorney General's Department has stated that the bylaws are illegal.

Rick Howard, Representative

NORTHERN #1

Due to inadequate travelling expenses it has not been possible for me to attend many Board and Council meetings which are held in Winnipeg. Without this involvement and regular participation by the Northern Region, environmental issues in the North, or two thirds of our province, are being neglected.

Saskatchewan River water quality and volume shortages continue to be a serious matter for the town of The Pas. Contingency plans are now being made in preparation for the anticipated shortage of water due to drought conditions in the west.

Adequate volume and quality water is available from Clearwater Lake if adequate funding was made available. This situation is not expected to get better, but will continue to worsen.

Manitoba Provincial Parks plan to locate a sewage lagoon on the Clearwater Lake watershed has been placed on hold, and a alternative site is being explored off the watershed. This decision will greatly assist in ensuring that future surface developments will not occur on this watershed.

The use of herbicides, to remove brush and weeds along the Canadian National Railway Line (Hudson's Bay Railway) 512 miles north from the Pas, is creating concern throughout that area. This is not an agricultural area and there is concern that the effects of continual herbicide use will harm the environment of the area. Prior to herbicides becoming available, weed and brush removal was done by hand and this created employment in an area where unemployment is of major concern. Public hearings regarding this matter should be held at suitable locations in the area.

A proposed highway extending #10 north to Pukatawagon and Lynn Lake from the Flin Flon area is now being studied to decide on a route, as well as the costs. This will give access to a number of potential mines in the area as well as assist Manfor in their forest harvest requirements. A highway through this area must be closely monitored to ensure environmental concerns are not overlooked.

The Wildlife Advisory and Planning Board under the Northern Flood Agreement, involving the five Indian Bands of the area, and the communities of Norway House, Split Lake and York Landing, is progressing in developing what is referred to as joint management of wildlife in a vast resource area defined by their Registered Trapline Sections. The communities and people of this vast area are highly concerned and aware of the bad effects uncontrolled development can have on their environment and quality of life. These people cannot be overlooked when dealing with environmental matters and should be involved in our Environmental Council.

Murray Wagner, Chairperson of the MEC ad hoc committee on division of the Northern Region, has been doing a commendable job. The Northern Region, two thirds of our province, surely needs more involvement with environmental matters, however, I cannot see this being effective unless adequate funding for travel to meeting locations can be obtained. Environmental concerns cannot be adequately dealt with by Winnipeg without northern involvement and participation.

E.B. Johanson, Representative

TECHNICAL COMMITTEE REPORTS

WATER AND WASTE

The Water and Waste Committee felt that there should be uniform standards for drinking and recreational water throughout Canada. Safe drinking water should be available to all communities including rural and northern communities. A brief was sent earlier to the Minister of Environment regarding safe drinking water, but standards for the safe drinking water are still under revision. The Water and Waste Committee will pursue this matter further when the standards are available.

Rafferty and Alameda dams in the Province of Saskatchewan will cause water levels in the Souris River to fluctuate. This point was discussed at one of the board meetings and it was agreed that more information was needed in order to act on this subject.

Atish Manier, Chair

EDUCATION COMMITTEE

The Education Committee met twice during the past fiscal year, in September and October. A further meeting in November was cancelled. The committee met to discuss its objectives but was hampered in this task by the demoralization of its members as a result of the MEC's uncertain status under new environmental legislation. The Committee discussed potential programs to improve public awareness of the environment, however funding constraints on the MEC budget have prohibited any from being pursued.

Mark Trottier, Chair

WILDLIFE COMMITTEE

The Wildlife Committee's monthly meetings during the past year were well attended and active participation was evident from its members. It was decided to concentrate on habitat as fundamental to allied issues as diverse as big game hunting, garter snakes and hydro development.

Those members present at the January 5th meeting were honoured to receive the refreshing insights of Mr. Art Hoole, Director of the Wildlife Branch of the Department of Natural Resources. Our guest gave the committee an overview of the Branch's operations and directions and commented on their land acquisition and deer relocation programs, the monitoring of snake harvesting and the state of moose populations in the province. Mr. Hoole referred to current and continuing efforts to integrate virtually all distinct departments such as Agriculture, Parks and Forestry with Wildlife. He also indicated a somewhat diminished emphasis on the more traditional role of management of hunting or fishing populations and a recently augmented emphasis on broadening the traditional definition of wildlife to encompass endangered plant species.

Ross Thompson, a biologist with the Wildlife Branch, attended our March 8th meeting and spoke from his first hand knowledge of the functions and activities of the Caribou Management Board.

In the committee's final meeting, last month, three new topics came under consideration, herbicide usage on transportation rights-of-way, a proposed road through a wildlife management area and what has been termed, "secret slaughter", the destruction of wild animals for the sole purpose of procuring but a few of their body parts for actual or perceived specialized usage.

The past year has proven to have been informative and challenging and bodes well for future projects and endeavours of the Wildlife Committee.

Barry R. Wild, Chair

ENVIRONMENTAL CHEMICALS

The Committee met only twice during the year. Few major projects were undertaken because of preoccupation with the changes to the MEC proposed by the new Environment Act.

The only major initiative was a response to information supplied by the City of Winnipeg Entomologist, Dr. R. Ellis, on the assessment of proposals by a local biological control firm to use parasitic wasps (Trochogramma minimum, imported from California) and ladybeetles, to control spring and fall cankerworms and aphids, respectively, on city trees.

After consideration of the available information, we concurred with the current City policy of using the biological insecticide, Dipel, against cankerworms, and their non-intervention policy with regard to aphids.

Parasitic wasps from California do not appear to be a viable alternative, but we suggested that the supplier, in conjunction with the City, fund a small, independent project to determine whether or not these wasps can effectively reduce cankerworm egg populations under Winnipeg conditions.

Aphid feeding on Winnipeg trees is primarily an "aesthethic" problem that does not threaten the survival of the trees. Even if control was judged to be warranted, we would not recommend the use of ladybeetles because the chance of success is negligible, due primarily to the fact that these beetles are highly dispersive and would be unlikely to provide even temporary alleviation of the problem. The support of Mark Trottier is greatfully acknowledged.

Dr. W.J. Turnock, Chair.

BRIEFS

1. Wildlife Inventory in Northern Manitoba

Recommendations:

In order to enhance the continuation of the diversity of species in Manitoba, the Manitoba Environmental Council urges that the Minister of the Environment assist the Minister of Natural Resources in conducting a wildlife inventory in northern Manitoba and update the Wildlife Act on the basis of the inventory.

Background:

The minimum wildlife responsibility for any jurisdiction is to conduct inventories to determine species present. The remoteness of northern Manitoba has precluded the region from such studies, consequently there is little information available on species and populations present in parts of the region. Recent and planned developments in the region could affect the survival of wildlife species and populations that have not yet been properly documented.

The southern half of Hudson Bay is a legal "no man's land" (Bankes 1987), making management plans difficult to establish. Developments such as river diversions can have a profound effect upon wildlife populations and habitats. At present both the Churchill and Nelson rivers have been altered for hydroelectric power generation. The Seal River is being considered for future hydroelectric development. Many species of wildlife utilize the estuaries of these rivers but are not identified as a concern of the Province of Manitoba.

The beluga whale (Delphinapterus leucas) is not considered in the Wildlife Act. The Province does recognize the close association between the Cape Churchill Wildlife Management Area and the beluga by listing this species in their management plan. However, the management plan does not refer to the beluga as a species that is subject to provincial management. During peak utilization of the Churchill estuary there can be as many as 3,000 belugas present. These animals tend to concentrate in the freshwaters of the estuary (Watts and Draper 1988).

Consideration should also be given to the use of estuaries and rivers by seals. A group of Norwegian canoeists reported observing seals in the Seal River south of Tadoule Lake in July 1986. Local Churchill residents have sighted seals up the Churchill River as far as Red Head Rapids. Bowhead whales (Balaena mysticetus) have also been observed in the Churchill estuary (Watts 1988).

Management and conservation of wildlife species is dependent upon sound inventories. Consideration should be given to redrafting the list of species at present considered in the Wildlife Act, based on an intensive survey of northern Manitoba, including estuarine habitat which is, or may be, affected by provincial hydroelectric projects. A wildlife inventory in northern Manitoba would clarify the reported presence of barren-ground grizzly bears (Ursus arctos) north of the Seal River and confirm the presence of the large population of arctic ground squirrels (Citellus parryi) in the Caribou River area.

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Bankes, N, 1987. The status of Hudson Bay. Northern Perspectives 15 (4) : 14-15.

Watts, P.D. 1988. Bowhead Whale sightings off the coast of Manitoba. Canadian Field-Naturalist 102: in press.

Watts, P.D. and B.A. Draper. 1988. Beluga Whale ecology: a concern of freshwater biologists? Freshwater Biology, in press.

Presented by the Wildlife Committee (Originator: Dr. Paul Watts), 14 May 1988

2. Environmental Implications of Science and Technology

SUBMISSION FROM THE MANITOBA ENVIRONMENTAL COUNCIL TO THE SCIENCE COUNCIL OF CANADA ON ENVIRONMENTAL IMPLICATIONS OF SCIENCE AND TECHNOLOGY FOR THE NATIONAL REPORT ON SCIENCE AND TECHNOLOGY

We commend the Science Council for attempting the ambitious project of reviewing and assessing the effectiveness of Canada's science and technology. We further approve of the important position of environmental concerns in the Council's agenda as it looks at the role of science and technology in promoting social, economic and environmental well-being.

Our response primarily lists examples, concerns or views under the four subject headings outlined in Ruth Wherry's letter to the MEC of June 2, 1987. Before we address those, we have some comments of a general nature. Environmental well-being has historically not been the concern of the majority of science and technology efforts in Canada or in the world. In fact, it might also be said, to a lesser extent, that social well-being has not been the primary goal. Technology, product development and product marketing have been primarily profit-driven. This means that some, if not most, of the technology we have today was put in place without concern for the environment. Therefore, the research and development funds spent for technology and product development have been overwhelmingly larger than the funds spent to examine the environmental effects of those technologies or products, either before or after they were put into use. Thus, while common sense tells us that wastes we put into the atmosphere will fall back to earth or chemicals put into deep wells will emerge to the earth's surface again, societies and their governments during many decades chose not to monitor the fate of wastes and so effectively to ignore these possibilities. Consequently, our detection of environmental problems in North America and identification of causes has often been accidental and delayed, e.g. acid rain, the St. Clair River "blob".

All would agree that human activity has produced a wider variety of technologies than we would wish to see employed (e.g. nuclear weapons, biological warfare). In general, it has been a flaw, or perhaps the flaw, of human societies that they have been unable or unwilling, for the benefit of the society as a whole, to select among possible technologies or to select the scale of use of technologies. As well, we have not pursued the development of new technologies primarily for the purpose of benefitting the whole society. We have demonstrated that when we want them badly enough, we can develop desired technologies or products where they didn't previously exist, for example, the hydrogen bomb, the space program or the development of drugs to combat particular illnesses. However, these development efforts are at best spotty. Enormous gaps exist, therefore, in the range of technologies we have to choose from, e.g. soft energy paths have been poorly researched. The World Commission on Environment and Development states that "low-energy paths" "should form the foundation of the global energy structure during the 21st century." Achieving use levels near the present energy consumption from low-energy paths "will require a programme of coordinated research, development and demonstration projects."[1]

The solutions to some environmental problems appear to be (1) the removal of particularly damaging technologies and products from production and use and (2) more research and development to produce non-existent, desirable technologies. But, perhaps the most important new societal response is to develop the will and the capacity to select among technologies, the development of consensus processes for selection and the development of criteria for selection. The environmental impact process should be used to determine whether or not a project would take place or a product used. Currently, the EIA is used to mitigate, if it is used at all. Although regulations under legislation provide a method of selection, e.g., where new chemicals have to meet toxicity test requirements before being allowed to be

marketed, such regulations can only deal with known compounds and are inherently incapable of keeping up with new problems and new technologies.

There is an important recent precedent to indicate that on some issues, nations not only are selecting among technologies but undertaking large-scale research and development to create new needed technologies. This precedent is the ozone treaty (Montreal protocol) of September 24, 1987. Nations are in the process of ratifying an agreement by which they will choose not to use chlorofluorocarbons (except in small quantities), will conduct research to find alternatives and will test the alternatives for safety before using them. This is a highly significant but nevertheless small indication of willingness to select. The other highly damaging global problems of long-range transport of air pollutants and global warming are not being addressed by this sort of global political will. "Selection" among technologies implies an understanding of the system for which the selection is being made. Otherwise, it will not be possible to evaluate the possible alternatives or to know the attributes of the new technology which is sought. This understanding includes as the most fundamental ingredient, knowledge of the biosphere (ecosystem processes, the role of genetic diversity and the natural science basis of sustainability). Layered on these are all the social, political, spiritual, legal, economic, ethical considerations/ preferences/"realities" of various societies.

It is crucial that the Science Council's National Report on Science and Technology stresses the dependency of human societies, their science and technology, on the natural world, or biosphere and the requirement that we select technology which is compatible with the biosphere while meeting of purely human goals within that biosphere.

1. <u>NEGATIVE IMPLICATIONS FOR THE ENVIRONMENT ARISING FROM THE DEVELOPMENT AND APPLICATION OF SCIENCE AND TECHNOLOGY:</u>

a. Use of large machines in clear-cut forestry far outstrips the controls on the technology, generally precludes low technology alternatives and encourages practices, the effects of which are not well known. The high capital and operating costs for the machines and the tax structure require intensive operation and determine that forestry will be carried out by clear-cutting rather than selective cutting. Two men with chain saws and a horse can make more money than two men trying to keep up payments on the machine. Horse logging can continue in all seasons, and all terrains whereas machines can work only in frozen or very dry seasons. Not only do the machines dictate clear-cutting but also will encourage monoculture with associated herbicide use and genetic selection. We do not yet have the means or the political will to determine how much of the landscape, if any, we should devote to tree farms as opposed to forests. When clearcutting is performed in some northern areas, the break in the forest microclimate is such that there is no natural regeneration. Reforestation may be difficult. Thus, in effect, the tree line moves south. In Finland, clearcutting is not permitted north of a certain latitude.

b. Tributyltins are receiving wider and wider application, not only in maritime paints, but also in household paints, textiles and as pesticides in agriculture and aquaculture. There is a build-up of these chemicals in the St. Lawrence River, Great Lakes and Lake Winnipeg. In some areas, including areas of heavy ship traffic, they destroy the invertebrate benthic community (e.g., gastropods) leading to increased erosion of bottom sediments, to deformities in organisms and to impoverishment of species.

c. The most conspicuous example in Manitoba of the application (misapplication?) of technology is that of the Churchill-Nelson Diversion for the purpose of augmenting the flows of the Nelson River for generation of hydroelectric power. Central to the

controversy, which is still active today, was the necessity of involving the Churchill River, Southern Indian Lake, lakes and streams emptying into the Churchill, and the Rat-Burntwood systems. An alternative would have been generating stations on the Nelson River only or on both the Nelson and Churchill Rivers without diversion. As was clear from a public forum on Southern Indian Lake and hydro development held by the Manitoba Environmental Council on January 19, 1973, there was considerable question as to whether enough was known to evaluate the environmental impacts.[2] "No one has ever diverted a river like this through an artificial channel in a permafrost area;"[3] "If we don't abandon it (the Churchill Diversion) it's not a question of not paying for it. We'll be paying for it through resource destruction."[3] Nevertheless, Hydro's position was that Hydro had "looked at these matters (alternatives). The economics are so unfavourable that Manitoba Hydro could not consider these (non-diversion) as viable alternatives."[3] After more than 15 years of study, many of the effects of Churchill-Nelson diversion are known and "in many respects, the environmental effects are more severe than previously foreseen."[3] Nevertheless, parts of the system were poorly monitored and the true impacts likely never will be known, e.g., fisheries resources of the upper Churchill lakes and of the streams along the Churchill and along the Nelson River below Long Spruce Station, the effects on the belugas which use the Churchill estuary. Biological, physical, chemical, social and economic impacts have been documented by the Department of Fisheries and Oceans.[4] A provincial-federal study of mercury in the area affected by the Churchill River Diversion has recently been released.[5] As a result, no doubt, of consuming fish with elevated mercury levels from the Diversion route, some of the people of South Indian Lake and Nelson House communities have blood mercury levels above the normal range of 0-20 ppb. A small percentage of women of child-bearing age had mercury levels above 20 ppb and one value of 125 ppb was found. The methyl mercury contamination of Northern reservoirs will persist for decades.

d. A problem related to the use of chemicals without attention to their fate in the environment is the accumulation of organochlorine compounds in fish and marine mammals in Arctic regions. The compounds have reached high enough levels in some tissues that consumption of even a small portion would cause a person to take in more than his "acceptable daily intake." The sources of some of these compounds are outside Canada, and so the need is for technical data that are so persuasive that they can convince source countries to stop releases.

e. Farming practices can be damaging to the environment as when there is high dependence upon chemicals. Nevertheless, even extensive, low-input farming as opposed to intensive, high impact management can be detrimental. Even though it reduces the amount of pesticide and fertilizer use it discourages zero and reduced tillage. Therefore, losses of soil through erosion appear to be a much greater danger to the crop lands and to streams and lakes than under the judicious use of herbicides and reduced tillage practices.

f. Bromoxynil is used as a herbicide in agriculture. In the area of Elie, Manitoba, it has been found to enter the ground water. Research on chemical breakdown has largely been done in surface waters but the chemical breaks down more slowly in ground water. The water supply to the town of Elie, the Elie aquifer, contains 0.13 ugL^{-1}. The concentration rises from year to year. The health implications from drinking water contaminated with bromoxynil are not known.

g. High speed pumps used in irrigation in agriculture and urban development have the effect of draining aquifers faster

than they can recharge. The result is that in communities like Birds Hill, Manitoba, the aquifer has been depleted so that there is not enough water to meet the needs of residents.

h. Salinization of soils occurs through the accumulation of salts as irrigation water evaporates leaving the salts, e.g., at Elie, Manitoba. It also occurs in dryland farming particularly in the west when rotations use summer fallow. The water table rises and salts stay at the surface in low spots when the water evaporates. This is seen at Ste. Rose du Lac, Manitoba.

i. Mining technology became more efficient in extracting gold and molybdenum by using arsenic and cyanide. These chemicals are dumped with the mine tailings. A valley about 2 km long and 0.3-0.4 km wide near Wadhope, on Highway 304 east of Bissett, was used in the 1940's and 50's for receiving drainage from a gold processing mill using arsenic. It is an example of the kind of wasteland which can be created in this way.

j. Chlorination in water treatment can lead to the formation of undesirable trihalomethane compounds in the presence of organic matter.

k. Development of the spray paint can has resulted in widespread uncontrolled use such as in defacement of public property or the natural rockfaces. These eventually lead to leaching of the paint components, including fluorescent materials, into waters.

l. Irradiation of foods for the purpose of preservation is one of the most blatant examples today of technological overkill. There are significant reservations on the part of many people concerning the wisdom of this technology.[6] Concerns include the safety of consuming food which has been altered biochemically by irradiation. Most likely, a far greater concern is the safety to people including industry workers and the environment of the transport, use and disposal of Co^{60} considering that 1,000,000 curies of Co^{60} are used in the irradiation process. This technology is being particularly targeted for the Third World which may not have the expertise and infrastructure to control, operate and dispose of radioactivity of this magnitude. An example of the unexpected is the case of an exhausted medical Co^{60} source of 450 curies from a hospital in Mexico being unintentionally included in scrap metal and incorporated into steel. The mistake was discovered in the U.S. two months later, only when a truck carrying the contaminated steel accidentally entered and triggered an alarm at the Los Alamos weapons testing base. More recently in September, 1987, in Brazil, 1400 curies of CS^{137} from a cancer therapy machine in an abandoned clinic fell into the hands of junkyard scavengers. 244 people were contaminated and 4 have died.[7] Further to this argument is that there appears to be an equally effective, low technology, low cost, safe alternative for food preservation. This is the "controlled atmosphere" method employing 2% CO_2, 2% O_2, and 2% N_2. This kills all microorganisms, inhibits ripening, doesn't affect enzymes and doesn't change texture.

m. The process for bleaching paper products generates dioxins which get into the environment when the paper is disposed of. Dioxins have recently been found in the effluents from pulp and paper mills on the coast of B.C.

2. <u>INVESTMENT IN SCIENCE AND TECHNOLOGY TO REVERSE OR MINIMIZE ENVIRONMENTAL DEGRADATION IS A PROFITABLE ACTIVITY:</u>

a. The use of biological pesticides, particularly insecticides based upon <u>Bacillus thuringensis</u> and other insect pathogens is increasing due to the

interest of the agricultural chemical industry in marketing alternatives to chemical pesticides. However, classical biological control, through the introduction of exotic parasites and predators is not progressing rapidly, because once released, the organisms perpetuate themselves. Thus while there is a benefit both to producers and the environment there is not an ongoing market. Therefore, for this kind of product long-term public-funded research is essential. The benefits are difficult to quantify but the costs of the research are obvious. Despite the fact that the benefits of successful programs greatly exceed the cost of all programs, federal reductions in research funding prevent full development of this approach. In a period of limited research funds, long term solutions lose out to short-term protection research (e.g., more effective prediction and monitoring techniques to enable producers to reduce pesticide application and to apply at the most effective time).

b. Similarly, research to develop cultivars resistant to insects and diseases has a lower commercial payoff than the development of pesticides. Federal research to provide resistant cultivars is also facing restricted funding and commercial breeders have not considered resistance to pests as a priority in cultivar production and marketing. For example, genetic resistance to European corn borer in corn is well known and available to all breeders. Nevertheless, hybrid varieties are produced, marketed or withdrawn from the market on the basis of their potential yield without consideration of their resistance to this pest. Thus, the producer does not determine whether or not a new variety is resistant. Resistant hybrids may disappear from the market without their value being recognized. These examples show that development of alternatives to pesticides may be environmentally beneficial but they are not as commercially profitable as chemical production.

c. The events surrounding the accidental industrial fire and release of oil under the ice to the Athabasca River in February, 1982, illustrate that investment for pollution prevention can be a preferred alternative to litigation. In the February, 1982 incident, Suncor did not mobilize the emergency equipment it had at the time of the accident. The discharge of oil to the river exceeded its licence limits. The Lake Athabasca Delta commercial winter Whitefish fishery was subsequently closed due to tainting. Although Suncor was fined only $7,000 upon its conviction (one day's fine), the costs for legal fees far exceed this. The company has spent $5-6 million to improve its waste treatment facilities to prevent future discharges to the river. This is to reduce the possibility of expensive lawsuits in the future. The province of Alberta reimbursed the natives for the lost fishery for the year.

d. In spite of considerable study and conferences on recycling in Manitoba, the opportunity to recycle household wastes is sporadic and not yet present on a broad scale. Beer depots accept empty bottles of only one height; shorter or taller bottles are rejected, as are out of province products. Nevertheless, there have been some events held each year which promote deposition and recycling of items. There include old newspapers and paper products, aluminum cans, old batteries, old clothing and glass bottles. Household Hazardous Waste Days have been held twice in conjunction with Canadian Environment Week in June each year. The Recycling Council of Manitoba Incorporated has held, two depots in June and October of 1987 with plans for a third recycling day in March, 1988. The Manitoba Softdrink Recycling Incorporated is promoting the collection of aluminum cans and plastic bottles through collection boxes which have been distributed throughout Winnipeg and parts of Southern Manitoba. A mobile collection unit has been

travelling to seventeen shopping centre locations in Winnipeg to promote a buy-back program for aluminum cans and bottles. In addition, they have set up two glass depots this year in Northern Manitoba.

Community composting, perhaps based on leaf fall from areas of Winnipeg with high tree density (Wildwood Park, the river banks) have not received attention, and is for the most part left to the individual homeowner. Community compost could be retailed to gardeners.

At present, the only meaningful recycling of household goods - clothing, toys, electrical appliances, furniture is through donations to the Salvation Army. The province has established a Recycling Coordinator who is working with these various organizations to promote recycling programs. Manitoban cities have not yet recognized the cost-effectiveness of recycling as have Ontario cities with their pick-ups of sorted household garbage.

3. ENVIRONMENTAL CONSTRAINTS BEING IMPLEMENTED AS PART OF THE PLANNING PROCESS:

a. The Manitoba Environment Act, passed in July, 1987 and to be proclaimed in April, 1988, could be an important step in this direction. Nevertheless, many of the regulations are still being drafted and how the Act will be implemented is yet unknown. For example, regulations outlining the criteria for the three classes of projects and describing the assessment process for each are being drafted. The criteria for go/no go decisions and methods of ensuring that EIS are of high quality are still unknown. The Act delegates much of the EIA for Class 2 developments to the departments carrying out these developments. For none of the developments, even hydroelectric development or forest licences, are public hearings mandatory under the new Act.

b. Environmental concerns are being addressed earlier in the evaluation of current hydroelectric developments in Manitoba than they were previously. This is evident as one compares the Grand Rapids project (25 years ago). the Churchill-Nelson Diversion (15 years ago), the Limestone generating station (under construction) and the Conawapa station (planned). Nonetheless, the EIA of Limestone and of the Churchill-Nelson Diversion were both done after the projects were a "fait accompli". Manitoba Hydro approached the Manitoba Environmental Council and the Manitoba Naturalists Society in 1986 to hear their general environmental concerns with respect to the Conawapa Generating Station and associated high voltage transmission lines. It is not clear to what extent environmental concerns, however, will affect the Conawapa project going forward, its design or the nature of environmental monitoring planned.

c. Although there is an obvious move toward including environmental assessment in the planning process, implementation is slow and it is still considered only in light of possible amelioration steps, rather than as an important factor in deciding whether or not a project is feasible. This is emphasized by Rosenberg et al (1987)[8] when they state that "abandonment of (hydroelectric) projects after completion of the pre-development phase is rarely attributable solely to environmental reasons."

4. POLICIES THAT SUSTAIN AND EXPAND THE ENVIRONMENTAL BASE:

Considerable effort should be spent by the Science Council in examining the concepts of "growth" and "policies that sustain and expand the environmental resource base" (Science Council). While the World Commission on Environment and Development calls on economic growth to stop the cycle of poverty and debt which lead to environmental

overexploitation and degradation, the currently accepted concept of growth may be a fallacy. Rather, we should be aiming towards contracting or stabilizing in some economic sectors and expanding in others. We should reorient growth, in the industrialized nations at least, towards increased efficiency of energy and materials use; computerization and miniaturization; methods of pollution control and recycling; human expression e.g., the arts; and human self-actualization (conscious vs. automatic living). In other words, we may need to orient to a smaller scale, to more regionalization, more individual and community participation and choice, and more direct contact with the biosphere and our biological interconnections. There is need for an environmental Bill of Rights to bring the questions of development and economics into the legal sphere, so that an individual can sue for pollution or damage to his/her environment. Furthermore, there is need of a universal declaration on environmental rights in parallel to the universal declaration on human rights and the rights of the child.

The following are directed at the recent policies listed:

a. <u>The federal/provincial and Canada/U.S. agreements to reduce sulfur dioxide emissions:</u>

The federal/provincial agreements to reduce SO_2 emissions are important and being implemented. In Manitoba, SO_2 emissions by Hudson Bay Mining and Smelting at Flin Flon and INCO at Thompson, will be controlled by regulation within the limits set for Manitoba by these agreements. Formerly, SO_2 emissions were set by Clean Environment Commission order and had no particular relationship to absorptive capacity of the environment or particular concern for out-of-province effects. Nevertheless, there is concern among most Canadian scientists that the limits of 20 kg/ha/yr wet sulfate deposition are too high to protect the environment. Minnesota has adopted 11 kg/ha/yr and many scientists feel a limit of no more than 14 kg/ha/yr would be more prudent to adopt. There are no meaningful Canada/U.S. agreements to reduce sulfur dioxide emissions. Without these, Canada will have little relief from acid rain.

b. <u>The Canada/U.S. agreement to clean up the Niagara River:</u>

No comment.

c. <u>The proposed Environmental Protection Act:</u>

The Environmental Protection Act is an important step nevertheless, we agree with the comments of Bill Blaikie, MP.[9]

"When we look at the fact there is so much ministerial discretion involved, so much devolution of powers to the provinces with respect to how the Act will be enforced and administered, when we consider the persistent exclusion of important areas of concern such as pesticides and radioactive substances, when we consider the failure to include an environmental Bill of Rights or to give individual Canadians a standing in the courts with respect to environmental concerns, when we consider all those things it becomes clear that the Canadian Environmental Protection Act is not the comprehensive piece of environmental protection legislation the Minister of the Environment has been promising."

d. <u>The increasing emphasis on policing and enforcing existing legislation for environmental protection.</u>

There is little evidence for increased enforcement in Manitoba of the Clean Environment Act. Apparently, only one major conviction was under the Act in its 15 years existence.

e. <u>The FEARO review:</u>

The most significant lack in the FEARO process is meaningful go/no go decision-

making based on environmental criteria. Again, comments of Mr. Blaikie[9] express this concern we have:
"The recent ruling by the Minister of the Environment (Mr. McMillan) with respect to the Federal Environmental Assessment Review Panel that was set up to examine the effects of low-level flying in Labrador. The Minister ruled that the panel set up to study the environmenttal consequences of this low-level flying could not recommend against it, that it could only make recommendations with respect to how the effects of the flying might be mitigated.

It seems to me, leaving the question of the actual environmental effects of low-level flying aside, that the ruling of the Minister jeopardizes the very notion of environmental assessment. Surely if we are committed to assessing the environmental consequences of something, we have to be open to the possibility in theory that the environmental consequences will be so bad that the people charged with that assessment could recommend against doing it."

There is, as well a lack of confidence in the FEARO review process. The FEARO panels can be biased, unqualified to assess technical data and of inappropriate constitution to be able to make an environmentally sound decision. We provide a specific example to support this opinion. The example is the recreational development which has been proposed in 1979 by Indian Band No. 40 for Indian Bay of Shoal Lake, the source of Winnipeg's drinking water. The first phase of this high-density development proposal entails the construction of 350+ cottages, 80 condominium units, restaurant, marina, gas station, lumber yard facilities, mink ranches and trailer parks on a strip of land upstream from and within sight of the Winnipeg water aqueduct intake.

In this case, the FEARO panel could not have been expected to make an informed, objective decision, since none of the questions that should have been addressed by a knowledgeable group of thinking, concerned individuals were asked. These are outlined in Appendix I. While the interests of the developers were amply represented on the panel, those of scientists and environmentalists were lacking. The panel did not seek such expertise and even repelled the attempts of scientists to provide relevant information. Public hearings, where scientists could have come forward, were never held and the panel would have been unable to understand their arguments in any case. This matter continues to be unresolved after nearly 10 years.

f. <u>The creation of the National Task Force on Environment and Economy:</u>

The National Task Force on Environment and Economy was set up to promote dialogue between government and industry on environmental matters. As that it has been enormously successful and surpassed all but the wildest expectations. From its inception, the Manitoba Environmental Council argued that the Task Force should have a third arm composed of academics/scientists/ENGOS to equal the government and industry arms. This recommendation was not accepted. The report reflects the lack of scientific input and is not really an appropriate vehicle to "produce a blueprint to guide governments and business's in linking economic development and environmental protection". The reason is that the Task Force report does not have a conceptual foundation based on the biosphere (ecosystems approach) and therefore, does not develop a clear vision of where we have to go. As someone said "If one puts the cart before the horse, there is trouble finding the reins". The problem does not lie in lack of knowledge of the

environmental "crisis". Both industry and politicians know as well as or better than the scientific community that we are overextending our use of renewable and non-renewable resources. The problem is that both groups benefit (in the short term) by brinkmanship and have nothing to gain by promoting the enormous changes society will have to make toward a sustainable society. Related to this bias of the Task Force is a lack of call for strengthening our financially-strangled scientific research and development communities in this country which may be able to supply needed information and technology upon which society might make wiser choices.

g. The development of provincial and territorial conservation strategies:

The development of provincial and territorial conservation strategies if adequately financially supported and participated in by government and "the public" are potentially of extreme importance in bringing about a more sustainable society.

h. The increasing emphasis on the development and applications of alternatives to pesticides.

As indicated in 2 a above, this is a favourable development.

i. The increasing emphasis on the reduction recycling, recovery and re-use of wastes:

As treated in 3 d above, recycling of household wastes in Manitoba seems to have declined. Nevertheless, in terms of handling industrial wastes, Manitoba is making excellent progress. There is now a Crown Corporation, the Hazardous Waste Corporation, which is informing the public of its function and the issues. Several sets of public hearings have already been held, as part of an orderly planning process. Public hearings will take place next on site selection criteria. Furthermore, Manitoba has been involved for a number of years in an inter-provincial, industrial waste exchange.

j. The negotiations for an international treaty to control the release of chlorofluorocarbons:

The ozone treaty and protocol of September 24, 1987, are historic steps in global environmental treaties. Nonetheless, in terms of hard scientific evidence, one would have expected this would have been preceded by international treaties on control of acidic precipitation and treaties on the reduction of CO_2 emissions. Notwithstanding the enormous significance of multilateral action, the reasons why atmospheric chlorofluorocarbons (CFC) may be controlled earlier than SO_2, NO_x, CO_2, PAH's, polychlorinated hydrocarbons could be due to the relatively lower industrial dependence upon CFC's, the relatively low estimated cost for replacement (about $0.5 billion) and the threat of increased human cancer risk if the ozone layer is permanently damaged.

k. Environment Canada's recent style of management:

Environment Canada's multi-stakeholder consultation process is a significant step in opening-up the decision-making process. Nevertheless, there has been a great deal of dissatisfaction with the government "downsizing" and in particular with the 1985 cuts to the Canadian Wildlife Service. There is furthermore some concern that DOE is oriented toward environment in the service of economics, instead of economics within the biosphere.[10]

CONCLUDING REMARKS:

Optimistically, statements of intent by DOE and by the government should lead to an improvement in our treatment of the environment and to the clean-up of

existing problems. Pessimistically, governments continue to look only at short-term cost/benefits, restrict funding of projects with long-term benefits and allow short-term benefits to override the longer term costs to the nation from environmental degradation.

Evidence of real government commitment in Canada to sustainable development would have been inclusion of environmental impacts in the Free Trade negotiations. The Federal Minister of Environment was not part of the Cabinet Committee monitoring the negotiations. Senior environmentalists were not on the negotiating team nor "environment" on the bargaining table. Nevertheless, Canada's natural resources of oil, gas, hydroelectricity and water seem to be more accessible to our trading partner, the U.S., following a free trade deal. If the First Ministers discussed the environmental aspects of free trade at the First Ministers Conference November 26-27, 1987; it received no press coverage. Consideration of the Task Force Report on Environment and Economy was not conspicuous at the Conference even though economy and free trade dominated the proceedings. The First Ministers, however, did endorse the Report of the National Task Force.

Therefore, in overview, while there are many examples of major environmental clean-ups, (Great Lakes); greater public awareness and intervention (South Moresby); improved legislation (Manitoba Environment Act, Environmental Protection Act), it would be difficult to say at this point that we are moving to a less exploitive, less environmentally-damaging society. Technology, economic development, pollution become more wide-spread and their effects more subtle. There is, however, a feeling of optimism, a recognition of a greater, more mature role for non-governmental groups, more public awareness and vigilance and greater possibilities for information to flow within and among communities through media, computer networks, and satellite linkages.

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APPENDIX I

RECREATIONAL DEVELOPMENT ON INDIAN BAY OF SHOAL LAKE

1. The FEARO panel set up to deal with this proposal consisted of a sociologist, a planner, a chief of an Indian reserve where a similar development has been implemented already, a chemist-technologist and a staff member of the FEARO office. Only one of these panel members would have (marginally) the qualifications to deal with the highly technical environmental data and computer simulation models on which the panel's decision would have to be based. The panel did in fact demonstrate its incompetence in very disturbing ways. This can be illustrated by referring to the panel's "FEARO Questions of Clarification" which came out in response to the proponent's Environmental Impact Statement.[11] Some of these are outlined below.

2. The meat of the proponent's submission[12] was the Vollenweider computer model. However, the panel did not question:

a. why the estimated phosphorus loadings generated by the proposed development yielded a result for total expected phosphorus concentrations that was LESS than the CURRENT phosphorus concentrations already present in Indian Bay.

b. why the computer model used only 200 cottages in order to predict total phosphorus loadings from the development, although the latter was actually more than twice the size of the model.

c. why the respiration terms in the Vollenweider equation were included, since they are not an appropriate term for a Precambrian lake system.

d. why the graph in Fig. 6.3 of the proponent's Environmental Impact Statement had a wrong phosphorus concentration scale. This graph would have been a fundamental piece of information on which the panel's decision would have been based, but the panel did not remark on the error.

e. why the proponent classed Indian Bay as an oligotrophic-mesotrophic system when it is clearly eutrophic. This was subsequently pointed out by independent research as well as by Ecologistics Ltd., a Toronto-based consulting company. The panel apparently lacked an understanding of what constitutes a eutrophic system.

f. why the proponents used an inappropriate sampling regime to provide data for their computer simulation model. All samples were collected very late in the fall, when blooms have declined substantially in temperate lakes. Sampling locations were subjectively selected, with no rationale given. Only surface samples were collected. Values that were higher than what the proponents wished were selectively excluded from the Environmental Impact Statement, being dismissed as "isolated" and "nonrepresentative". No criteria were presented concerning what "nonrepresentative" meant. At certain times such "nonrepresentative" values would represent more than two-thirds of Indian Bay. The panel failed to notice this anomaly.

g. why the proponent contended that Indian Bay is spatially well-mixed and that Indian Bay and Shoal Lake are "parallel" systems when in fact the proponent's own data belied this contention did make a site visit to Indian Bay. The panel therefore, it is surprising that they did not question the proponent's contention that the maximum depth is 6 m (it is in fact 10 m)[13], and they saw for themselves that Indian Bay communicates with Shoal Lake by a channel that is only 100 m wide at its narrowest point. Since many vital calculations were made on this erroneous data, this was a large oversight on the part of the panel.

h. why the proponent discounted macrophyte production in Shoal Lake as "negligible" and that these grow only to 2 m depth. In fact, macrophyte production in Indian Bay can exceed 10 kg fresh weight per square meter (141,0000,000 kg for Indian Bay in 1985)[14]. Macrophytes in Shoal Lake grow down to depths of more than 14 m (these are the deepest known macrophytes in the world)[15] and Indian Bay is covered throughout by macrophyte stands. Since the panel made a site visit in summer, it is surprising they did not question this aspect of the proponent's model.

i. why the proponent misidentified organisms in the lake. For example, the Environmental Impact Assessment statement presents a number of macrophyte species that are not present in Shoal Lake, and omits others that are characteristic of the lake, but which, unfortunately, are also indicators of polluted conditions.[16]

j. why the proponent based extrapolations on a very small number of data points (in some cases, 2 points were used to predict values years in advance).

k. why the proponent failed to identify methodologies used in determining water chemistry values. Phosphorus values, for example, depend on the method used. The panel also failed to inquire how samples were collected and preserved.

l. why Pip's research data, consisting of 10 years of limnological work on Shoal Lake, were misrepresented and distorted by the proponent, yet Pip was never contacted to provide her data for the panel.

m. why the proponent's arrangements for septic field and sewage disposal could be considered acceptable when the panel toured the site and saw the near-absence of topsoil in the area and the marshy conditions between the outcrops.

n. which safeguards would be in place to protect Winnipeg's water supply in the event of a fuel spill at the marina or in the event of sewage system failure.

o. what restrictions might be put in place to limit application of herbicides, pesticides and other toxicants, both by the development corporation and by private individuals.

p. what restrictions would be in place to limit the clearing of aquatic vegetation for boat channels, docks and swimming areas.

q. what effects the construction and maintenance of a road to the development would have on Winnipeg's water supply.

r. what effects leaded fuels and garbage disposal would have on Winnipeg's water supply.

s. what Indian Band No. 40 and the cottagers would use for drinking water if Winnipeg chose the alternative to allow the development and construct a treatment plant for its own water.

REPORT ON RESPONSE TO COUNCIL BRIEFS

Diane F. Malley, Past Chair

The purpose of this report is to indicate the disposition of briefs and other recommendations submitted to the Minister following previous general body meetings. On 13 July 1987, briefs and other documents adopted at the 29 May 1987 Annual Meeting were submitted to Mr. G. Lecuyer. Two briefs called for action by the Minister on **protection of drinking water sources in Manitoba** and on **snow dumping practices in the City of Winnipeg.** Three briefs were ratified and sent to the Minister for information, **Brief to the Public Hearings held by the Manitoba Environmental Network and Manitoba Environmentalists, Inc. of March 14, 1987 on the New Environmental Legislation for the Province of Manitoba, Brief to the Clean Environment Commission of March 16, 1987 on the Parks Branch proposal for a Sewage Lagoon in Clearwater Lake Provincial Park** and **Brief to the Clean Environment Commission Public Hearings on May 26, 27 and June 4, 1987 on Smelter Stack Emission Regulation.** Two position papers were transmitted, on **larviciding of mosquitoes and monitoring the presence of W.E.E. antibodies in birds.** In addition, a motion passed at the Annual Meeting was transmitted: "that the MEC consider ratifying motion 1 of the Provincial Conservation Strategy meeting of May 23, 1987, namely 'that an ad hoc committee be established from among the participants of the May 23, 1987 meeting; and that the ad hoc committee be associated with the MEC until such time as the ad hoc committee adopts another format'".

Mr. Lecuyer responded to these briefs and positions on 10 September 1987 and circulated copies to the Premier, to the Minister of Natural Resources, Mr. L.E. Harapiak, and to the M.L.A. for Inkster, Mr. D. Scott, for their information. He indicated he was pleased that the MEC will continue to contribute to the formulation of the Province's conservation strategy.

Council's brief on the **protection of drinking water sources** recommended that the Government of Manitoba adopt unified safe drinking water legislation and it suggested a number of requirements for that legislation. The brief documented a number of cases in Manitoba of contaminated or threatened drinking water sources. Mr. Lecuyer responded that the protection of drinking water is a priority issue of this Government. Nevertheless, the government did not accept the recommendation for safe drinking water legislation. Rather, the Minister responded that "a unified purpose is more appropriate than unified legislation. In order to accomplish a unified approach to water uses, a series of Provincial Water Policies are being developed by an Interdepartmental Committee. These policies will serve as a framework for preparing programs, strategies and activities that involve the rational and prudent use of our water". The Minister agreed that the provision of safe drinking water, being a public health concern, warrants specific legislation. The protection of water sources is an environmental concern and will be covered by the new Environment Act. The Act will provide a mechanism to address all developments which may affect water quality, not only point source discharges. "It is recognized that multiple use of our natural resources can be made without jeopardizing the water quality. The Manitoba Surface Water Quality Objectives state that ' ... it is the intent that man-induced water quality alterations not

cause an unacceptable increased risk to public health or an unacceptable increased cost to the water user or supplier'". Mr. Lecuyer also stated that Manitoba accepts the National Drinking Water Guidelines as a base standard for determining acceptable water quality. The Department is represented on a subcommittee reviewing and updating the Guidelines. It is recognized that the National Guidelines may not be applicable in some cases to the Manitoba situation.

The Council's brief on **snow dumping practices** recommended to the Minister that snow dumping practices in the City of Winnipeg be reviewed by the Department with the objective of adopting appropriate regulations that will ensure environmentally acceptable stockpiling of this waste product. The Minister's response was partial acceptance of this recommendation. "The disposal of snow onto waterways has been limited in recent years, but this practice may warrant increased controls". He states that under the new Environment Act "all practices of the City of Winnipeg which may affect surface water quality may have to be reviewed".

The Minister acknowledged the Council's brief on the **new environmental legislation** and stated: "The Department extends its appreciation to the MEC for its input into the development of the legislation. The Act reflects many of the changes suggested by the MEC, and we look forward to working with Council in the implementation of this important initiative". It is clear that Council's feedback did influence the final legislation given Royal Assent on 16 July 1987. Nevertheless, some of Council's concerns remain and could be addressed in future briefs to the Minister: e.g. the lack of mandatory public hearings for any developments regardless of scope or impact. The operation of the Act should be a focus of Council attention - the effectiveness of the public registry as set up in serving as a source of information for the public, the nature of the ministerial agreements and their implications for the effectiveness of environmental impact assessment and the adequacy of funding for the Department, the CEC and the MEC in terms of their responsibilities under the Act.

Council recommended that the Clean Environment Commission reject the application of the Parks Branch to discharge sewage effluent into **Clearwater Lake** or any portion of its watershed. Council's reasons centered on the high level of protection from contaminants which should be afforded Clearwater Lake because of its exceptional clarity and purity, its low water turnover rate, and its potential to serve as a drinking water source for The Pas. The Minister informed the Council that the Clean Environment Commission issued Order No. 1116 which "established limits for effluent discharge and stipulated that the effluent must be discharged out of the Clearwater Lake Watershed basin. As a result of this Order, the Parks Branch has put a hold on the construction of the sewage lagoon at Camper's Cove". The Minister also indicted that the Department is proceeding with documentation to designate Clearwater Lake as "high quality", pursuant to the Manitoba Surface Water Quality Objectives. This designation will allow actions to be taken to protect the water quality of this lake from future developments. It is very possible that the decision to prevent sewage discharge by the Parks Branch within the watershed was influenced by the consistent position adopted by various environmental and citizens' groups on this issue.

In its brief to the Clean Environment Commission on **Smelter Stack Emission Regulation,** Council agreed in principle with the draft Manitoba Regulation Respecting Atmospheric Emissions from Inco and Hudson Bay Mining and Smelting. It then made a recommendation which probably was unique to the hearings. That was that in addition to regulation of emissions, Manitoba adopt a deposition standard. Council suggested a deposition standard of 10 kg wet sulfate/ha/year and recommended additional precipitation monitoring and trajectory modelling. Deposition standards are being adopted by some jurisdictions in the United States. Minnesota adopted 11 kg wet sulfate/

ha/year as its deposition standard. At the time of the Minister's response, the Clean Environment Commission had not completed the report of the hearings. The Minister indicated that the Manitoba/Canada agreement signed in April 1987 included a target deposition level of 20 kg wet sulfate/ha/year, double that which we recommended. The Minister indicated that precipitation monitoring is currently conducted in the north at Island Lake, Norway House and Gillam and did not indicate that this effort would be increased. He indicated that consideration is being given to undertaking trajectory modelling of emissions from Thompson and Flin Flon but did not address modelling of emissions which reach Manitoba from outside the province.

Council recommended the use of the biological insecticide, Bacillus thuringiensis israeli (B.t.i.) in place of chemical insecticides, dursban, methoxychlor and malathion, currently used by the City of Winnipeg for **mosquito larviciding.** The additional costs associated with the use of B.t.i. can be justified by the reduction in the impact on non-target organisms and environmental contamination in general. The Minister concurred with the Council's position that the use of B.t.i. "be promoted in any expanded larviciding program by the City or in any larviciding program proposed by other jurisdictions in Manitoba". He indicated that in its spring applications, the City has largely replaced the use of temephos with B.t.i. Cost is becoming less of a factor because B.t.i. is becoming cheaper to purchase. "With newer, more stable formulations available the City has tentatively planned eventual elimination of most applications of broad spectrum larvicides".

Finally, Council recommended that the province re-establish the sampling of **sentinel chicken flocks to provide an early warning of W.E.E. outbreaks** and that the wild bird program should be enhanced to make it more effective. Thirdly, when sufficient data are amassed to evaluate their relative effectiveness, that a decision be made to continue one of the programs indefinitely. The recommendation to re-establish the sentinel flocks was not accepted because the method is more costly than sampling wild birds and gives data on one site only. It is felt that the monitoring of wild birds is sufficient to provide public protection. "Need for specific monitoring will be assessed yearly and sampling will be carried out accordingly".

On 19 August 1987, the Minister responded to four briefs submitted to him following the 10 May 1986 Annual Meeting. One brief dealt with **safe drinking water legislation** and recommended that the Minister propose legislation establishing minimum quality standards for drinking water supplies in Manitoba, and recommended drinking water quality monitoring and community-based educational programs. The Minister responded that the province does not require legislation to control drinking water quality. Whatever standards are required of public water supplies for the protection of human health can be imposed without specific legislation. Given new scientific advances concerning drinking water quality, it would be unwise to enshrine "standards" in legislation. Manitoba is participating in the revision of the Guidelines for Canadian Drinking Water Quality. A drinking water quality monitoring program covering all the parameters even in the existing Guidelines would be very costly. Periodic comprehensive screening with a focussed monitoring for substances one would expect to find in Manitoba would be a better approach. The Minister states that there is no evidence that the public water supplies in Manitoba are presently a health threat. Finally, private water supplies are a concern and here an increased public education effort is a good idea. The Minister did not indicate whether this idea will be acted upon.

A second 1986 brief was on the subject of **asbestos in drinking water.** Council recommended a continuing ban on the use of asbestos concrete water mains, an expanded water testing program for asbestos in Winnipeg and other communities, an assessment of the carcinogenic hazard of asbestos in drinking water and monitoring of

standards set in the U.S. for recommended maximum levels of asbestos in drinking water. The Minister responded that a testing program will not accomplish anything useful since it would not indicate whether the asbestos poses a health problem. He indicated that the Department will continue to examine work going on in other jurisdictions so that decisions can be made on possible standards, recognizing that merely stating a value as a "standard" doesn't mean it is practical.

A third brief on the **development of a long term provincial water policy** recommended that the Minister and his colleagues develop a comprehensive long term water policy for Manitoba. As part of this policy there should be a statement of the long range plans for hydroelectric development for the province, that there be conservation of pristine areas, that there be a program of incentives and sanctions to prevent individuals altering water bodies and that there be public consultation on this policy. The Minister indicated that his Department has long advocated a provincial water policy. He listed several relevant developments and indicated that actions leading to open consultation on water issues are underway at the level of the Provincial Land Use Committee of Cabinet.

The fourth brief concerned an **environmental impact study for the Conawapa Generating Station.** Council recommended that Manitoba Hydro perform an environmental impact study for this development prior to any extensive investment in the design and preliminary stages of the project and that any mitigative measures indicated by EIS be incorporated into the design. The Minister responded that Hydro will be required to do the necessary impact assessment. It is expected that the new Environment Act will apply to the Conawapa project. It is the government's intention to formally require that appropriate mitigation be included in the project design and operation (as was done for Limestone).

In summary, of the eight briefs and positions directed to the Minister, four were not accepted, one was partially accepted and three of the recommendations are being done or are planned.

In terms of the three briefs directed to public hearings, some of Council's suggestions on the Environment Act were accepted, the recommendations on Clearwater Lake were consistent with those of a number of other groups and were accepted and it is not yet clear whether the recommendations with regard to sulfate deposition standards will be adopted. Although the rate of acceptance of Council's briefs was not high, it was substantial. It is important to recognize, furthermore, that Council has often advocated a position for a number of years before the government has moved in that direction, e.g. hazardous waste management and comprehensive environmental impact assessment. It is crucial that strong lines of communication are kept open with the Minister and through him/her to his/her colleagues. With that and sound, well-constructed and well-documented briefs on important matters, we can expect over time to broaden the consideration of environment in governmental decision-making.

Prepared for the Council Annual Meeting on 14, May 1988.

PUBLICATIONS LIST

The following is a list of MEC publications, several of which are now out of print but available in xeroxed copy from the Council Office.

Annual Reports:

1: 1973 (32 pp)

2: 1974 (74 pp)

3: 1975 (54 pp)

4: 1976 (79 pp)

5: 1977 (80 pp)

6: 1978 (87 pp)

7: 1979 (148 pp)

8: 1980 (101 pp)

9: 1981 (88 pp)

10: 1982 (68 pp)

11: 1983 (34 pp)

12: 1984 (33 pp)

13: 1985 (37 pp)

14: 1986 (54 pp)

15: 1987 (33 pp)

Studies:

1. J.J. Keleher & K. Z. Hendin. "Manitoba Problems & Public Opinion" (1973), 5 pp.

2. W. G. Leitch & J.J. Keleher, "Garrison Diversion Project Presentations" (1974), 61 pp.

3. J.J. Keleher, "Manitoba Environmental Agencies and Activities" (1974), 4 pp.

4. D. H. Boyd, "Impacts of the Garrison Diversion Unit on Canada" (1975), 177pp.

5. K. B. Richmond & J.J. Keleher, "Manitoba 2000. Population Size and Distribution" (1975), 130 pp.

6. Ken Arenson, Chair, "Nuclear Energy: Fact and Fantasy" (1975), 35 pp.

7. H.J. Selwood. "The Winnipeg Townscape: A Survey Guide" (1975), 35 pp.

8. William Bell, Chair, "Rural Land Use Conflict: Some Solutions" (1977), 130 pp.

9. W. J. Turnock, Chair, "The Energy Issue: Demand and Supply" (1977), 162 pp.

10. Alex Fedoruk, Chair, "Manitoba Water Quality Objectives: How Far Do We Go?" (1978), 145 pp.

11. Peter Aitchison, Chair, "Trees and Pesticides: An Environmental Dilemma" (1978), 37 pp.

12. Ken Arenson, Chair, "Winnipeg 100: Alternative Futures" (1978), 112 pp.

13. Rosemary Malaher, Chair, "Environmental Education: Hope for the Future" (1979), 51 pp.

14. John Jack, Chair, "Parks for Manitoba: Policy and Practice" (1981), 48 pp.

15. David Punter, Chair, "10th Anniversary Celebration" (1982), 41 pp.

Topics:

1. J.B. Nickels, Chair, "Environmental Quality Preferences:" (1982), 22 pp.

2. Anna E. Polonyi, "Wildlife Designation of Manitoba Crown Lands: Problems and Conflicts" (1984), 75 pp.

3. Lloyd Axworthy and Ken Arenson, Chairs, "Southern Indian Lake and Hydro Development" (1984), 73 pp.

4. A. Tompkins, L. Krampetz, D. Muir, and D. Malley, "Survey of Environmental Monitoring Programs in Manitoba" (1984), 46 pp.

5. Diane F. Malley, Chair, "Environmental Practices and Manitoba Hydro" (1987). 37 pp.

MEMBERSHIP LIST

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Mr. Murray W. Wagner
Ms. Jenny Rose Ward
Dr. P.D. Watts
Mrs. Olga Weber
Ms. Herry Wiebe
Mr. Barry Wild
Dr. Analee Yassi
Ms. R. Zimberg

COUNCIL ORGANIZATIONS

Association Manitoba Archeologists
Brokenhead Indian Band
Canadian Institute of Forestry
Citizenship Council of Manitoba
City Winnipeg Council
Eastern Regional Development Corporation.
Entomological Society of Manitoba
Inc. Pembina Valley R.D.C.
Interlake Development Corporation
Junior League of Winnipeg
Keystone Agriculture Producers

Manitoba Association of Urban Municipalities
Manitoba Association Registered Nurses
Manitoba Bar Association
Manitoba Chambers of Commerce
Manitoba Farm Business Association
Manitoba Federation of Labour
Manitoba Forestry Association Inc.
Manitoba Institute of Agrologists
Manitoba Medical Association
Manitoba Naturalists Society
Manitoba Parks and Recreation Association.
Manitoba Real Estate Association
Manitoba Teachers Society
Manitoba Wildlife Federation
Norman Regional Development Corporation.
Parkland Regional Development Incorporated.
Pembina Valley R.D.C.
Selkirk Town Council
Treaty Aboriginal Rights Residents
Union Manitoba Municipalities
United Steelworkers America
Wildlife Society, Manitoba Chapter
Winnipeg Labour Council
The Pas Indian Band

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee consisted of A. Maniar, B. Rotoff, and D. Muir.

Recommendations:

EXECUTIVE:
Chair, Dr. Ian Rollo
Vice Chair, Mr. Ken Lacroix
Secretary, Ms. Ingrid Schram
Past Chair, Dr. Diane Malley

STANDING COMMITTEES: (Chairs)
Membership Committee - Vacant
Publication Committee, - Vacant

TECHNICAL COMMITTEES: (Chairs)
Education - Mr. Marc Trottier
Energy - Mr. Martin Egan
Environmental Chemicals - W. J. Turnock
Environmental Impact Assessment and Review - Wayne Neily
Land Use - Mr. Dennis Muldrew
Water & Waste - Dr. Atish Maniar
Wildlife - Mr. Barry Wild

REGIONAL REPRESENTATIVES:
Winnipeg - Mrs. Betty Pawlicki
Eastern - Mr. Rick Howard
Parkland - Mr. Barry Wild
Central Plains - Mr. J. A. Knight
Interlake - Vacant
Northern - Mr. Ed Johanson
Pembina Valley - Vacant

PAST COUNCIL CHAIRS

The first organizational meeting of the Manitoba Environmental Council was held on January 28, 1972, when various task forces were set up to establish the Council's direction and operation. The following have served as the Council's Chairs:

1972-73 Lloyd Axworthy
1973-74 Lloyd Axworthy (to December 5, 1973)
Ken Arenson (balance of term)
1974-75 Ken Arenson
1975-76 Allen M. Landsdown
1976-77 W. J. Turnock
1977-78 Onno Kremers
1978-79 David Punter
1979-80 Rosemary Malaher
1980-81 Basil M. Rotoff
1981-82 Bill Kennedy
1982-83 Bill Kennedy
1983-84 Atish Maniar
1984-85 Atish Maniar
1985-86 Diane Malley
1986-87 Diane Malley
1987-88 Ian Rollo

COUNCIL STAFF

Keri Barringer - Coordinator
Eric Soprovich -Research Assistant
Emerita Osea - Administrative Secretary

FINANCES AND ADMINISTRATION

The Manitoba Environmental Council is funded by a legislative appropriation to the Environmental Management Division.

Fiscal Year	Voted	Expended	Per Cent
1971-72	N/A	N/A	N/A
1972-73	2,500	N/A	N/A
1973-74	18,200	7,400	41
1974-75	17,100	15,000	88
1975-76	15,000	16,200	108
1976-77	13,100	11,700	89
1977-78	16,300	15,132	93
1978-79	16,900	16,621	98
1979-80	16,900	20,432	121
1980-81	16,900	16,894	99
1981-82	25,800	27,437	106
1982-83	28,400	36,144	127
1983-84	27,700	18,558	67
1984-85	12,700	23,067	172
1985-86	12,900	25,700	199
1986-87	12,900	17,500	135
1987-88	12,900	12,900	100

COLOPHON

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APPENDIX A
MANITOBA ENVIRONMENTAL COUNCIL
BYLAWS

Article I - Name

1. The name of this Council shall be the Manitoba Environmental Council, hereinafter referred to as the **Council.**

Article II - Object

1. The object of Council shall be to act as an advisory body to the member of the Executive Council charged by the Lieutenant Governor in Council with the administration of the Environment Act, hereinafter referred to as the **Minister** for the following purposes: to provide advice and recommendations to the Minister on environmental matters, promote environmental awareness and provide assistance in developing environmental education programs; and to transmit the results of its activities to the Minister and the public and for the above purposes to initiate and take such action as may be appropriate and otherwise to fulfill its mandate as stated in the Environment Act.

Article III - Minister's Responsibility

1. The Minister shall provide to the Council, usually through his/her Department:
   - i. Adequate finances for Council activities;
   - ii. The services of an administrative officer;
   - iii. Departmental administrative services, secretarial services and office facilities;
   - iv. Services of Departmental personnel as required to facilitate Council activities;
   - v. Information as required to facilitate Council activities;
   - vi. Other services as may be required which are approved by the Minister.

Article IV - Membership

1. Honorary members shall be
   - i. The incumbents of the following positions in the Department: Minister, Deputy Minister and Assistant Deputy Minister responsible for environmental management.
   - ii. A Parliamentarian, who shall be appointed by the Minister, upon the recommendation of the Council's Board of Directors, hereinafter referred to as the **Board.**
   - iii. Any other persons appointed by the Minister, on the recommendation of the Board.
2. Regular members, hereinafter referred to as **members,** shall
   - i. Be residents of Manitoba appointed by the Minister, on the recommendation of the Board but no employee of the Department shall be appointed;
   - ii. Be appointed for a two-year term and may be reappointed;
   - iii. Represent themselves or an organization;
   - iv. Be expected to participate in Council's activities;

v. Not exceed one hundred (100), exclusive of those who have been granted a leave of absence by the Minister;

vi. Numerically be in proportion, insofar as practical, to the population of the Council regions which they represent.

3. To be considered as an organization for representation on the Council, any group should:

i. Operate on a non profit basis within the Province of Manitoba;

ii. Operate under a duly adopted constitution;

iii. Have a membership of more than 25 persons;

iv. Have members eighteen (18) years or older;

v. Have regularly elected officers;

vi. Agree to participate in activities of Council through its representative;

vii. Receive reports from the representative on activities of Council.

4. Each organization shall be represented by only one member. The number of members representing organizations shall be approximately the same as the number representing themselves.

5. Any conduct on the part of an honorary or regular member(s) likely to endanger the welfare, interest or character of the Council shall be investigated by the Board. The Board shall, by a two-thirds vote, recommend to the council whether the member(s) shall be exonerated, reprimanded, suspended or expelled. The Council shall recommend, by a two-thirds vote, to the Minister that he exonerate, reprimand, suspend or expel the member(s).

6. Resignations shall be addressed in writing to the Minister and submitted to the Board.

Article V - Regional Organization

1. Membership shall be decentralized on a regional basis to ensure that the Council reflects the environmental concerns of all Manitobans, has an overview of the environmental priorities of each region, and carries out regional activities.

2. Members shall represent the region in which they reside.

Article VI - Council Meetings

1. Meetings shall be at the call of the Board. There shall be at least two (2) meetings a year, one of which shall be the annual meeting. The annual meeting shall be the spring meeting.

2. Notice of meetings shall be mailed by the administrative officer at least two (2) weeks in advance.

3. A quorum shall be twenty (20) per cent of the regular members, exclusive of those on leave of absence.

Article VII - Officers

1. The Chair shall

i. Represent the Council to the Minister and the public;

ii. Preside at the meetings of Council, Board and Executive Committee;

iii. Have general supervision of all Council activities;

iv. Be an ex-officio member of all committees except the Nominating Committee;

v. Report to the Council at its meetings.

2. The Vice-Chair shall

i. Preside at meetings of Council, Board or Executive Committee in the absence of or at the request of the Chair;

ii. Encourage and assist technicel committees in organizing their activities and coordinate those activities which affect more than one committee;

iii. Become Acting Chair in the event of the Chair's inability to act.

3. The Secretary shall

i. Keep the minutes of all meetings of Council, Board and Executive Committee.

4. The Past-Chair shall

i. Report at Council meetings on the disposition of the briefs/resolutions previously submitted.

ii. Chair the Nominating Committee.

5. The administrative officer shall

i. Be appointed by the Minister with the approval of the Board;

ii. Be responsible to the Chair for Council activities;

iii. Be responsible for the day to day operations of the Council;

iv. Provide financial and activity reports to the Board.

6. Regional and Technical Committee Chairs shall:

i. Have minutes of meetings recorded

ii. Coordinate committee activities

iii. Be empowered to appoint technical advisors

iv. Report to the Board of Directors.

7. Other Duties

i. Officers shall perform such other duties as determined from time to time by the Board.

8. Election, Appointment and Vacancies

i. The Chair, Vice-Chair, Secretary and Regional Committee Chairs shall be elected at the Annual Meeting and each shall serve for one year or until his/her successor is elected. The Chair, Vice-Chair and Secretary shall not be eligible to serve more than two (2) consecutive terms in the same office.

ii. Standing Committee Chairs, except the Regional and Nominating Committee Chairs shall be appointed by the Executive Committee and each shall serve for one year or until his/her successor is appointed.

iii. The Nominating Committee shall be appointed by the Board.

iv. The Vice-Chair becomes the Chair for the remainder of the term upon the Chair's resignation.

v. Vacancies in the office of

a) Vice-Chair or Secretary shall be filled by the Board;

b) Standing Committee Chairs shall be filled by the Executive Committee;

c) The administrative officer shall be filled by the Minister with the approval of the Board.

Article VIII - Boards and Committees

1. The Board of Directors shall

i. Be composed of the Chair, Vice-Chair, Secretary, Past-Chair, Membership, Publications, Regional and Technical Committee Chairs;

ii. Have full power and authority over Council affairs including

a) formulating operating policies & establishing priorities for action;

b) making recommendations to the Minister;

c) respond to requests and recommendations from the Minister;

d) acting upon the recommendations of the Membership Committee, recommend to the Minister prospective persons and organizations for membership and terminations from or appointments to Council.

iii. Appoint ad hoc committees as required;

iv. Meet at the call of the Chair or upon the request of three(3) Board members, with a minimum of four(4) meetings a year;

v. Have a quorum when five(5) members are present, one of whom shall be a member of the Executive.

2. The Executive Committee shall

i. Be composed of the Chair, Vice-Chair, Secretary and Past-Chair.

ii. Carry out duties assigned by these Bylaws or by the Board or such other duties as are necessarily required to be performed between Board meetings;

iii. Conduct business by mail, electronic mail or telephone as deemed necessary.

iv. Have its actions ratified by the Board unless they were relevant to the duties as specified by the Bylaws;

v. Meet at the call of the Chair;

vi. Have a quorum when a majority of its members consider its business.

3. Standing Committees shall be

i. The Membership Committee

ii. The Publications Committee

iii. The Regional Committees

iv. The Technical Committees

v. The Nominating Committee

4. The Membership Committee shall

i. Be composed of at least three(3) members appointed by the Executive Committee but not more than one member may be a member of the Board;

ii. Serve for a term of one year and may be reappointed;

iii. Recommend to the Board

a) prospective persons or organizations for Council membership;

b) instruct the Board to clarify the names of those members or organizations who should be reappointed or who no longer qualify for membership;

iv. Become involved in the selection of a prospective organizational representative on the council in order to ensure that the person meets the requirements for membership.

v. Have a quorum when a majority of its members are present.

5. The Publications Committee shall

i. Be composed of at least three (3) members appointed by the Executive Committee;

ii. Serve for a term of one year and may be reappointed;

iii. Recommend to the Board the format of each publication series;

iv. Review the Annual Report for publication;

v. Approve, for the "Study" or "Topics" series original material or material published elsewhere;

vi. Establish and issue standards and instructions to facilitate its work;

vii. Prepare, periodically, categories or lists of recipients of publications for educational or reference purposes;

viii. Have a quorum when a majority of its members are present.

6. The Regional Committees shall

i. Be composed of those members assigned to the region;

ii. Become operative upon the election of its Chair;

iii. Identify environmental concerns and problems that affect its region;

iv. Ascertain and receive regional environmental complaints and grievances;

v. Arrange for regional activities including informational seminars;

vi. Have a quorum when ten(10) per cent of its regional members but not less than two(2) are present.

7. The Technical Committees shall

i. Be composed of all members who participate;

ii. Become operative upon the appointment of its Chair;

iii. Be created, combined or dissolved as required by the Board;

iv. Be listed, with their terms of reference, in the Standing Rules;

v. Have a quorum when three(3) members consider its business.

8. The Nominating Committee shall

i. Be composed of three(3) members, appointed by the Board at least 60 days in advance of the Annual Meeting; not more than two members may be members of the Board;

ii. Nominate candidates for the offices of Chair, Vice-Chair, Secretary and Regional Chairs;

iii. Submit its slate of nominated candidates to the administrative officer, with a copy to the Chair, 30 days before the business portion of the Annual Meeting. This slate shall be sent by the administrative officer to all regular members 14 days prior to the said meeting. Furthermore, all members shall be invited to make additional nominations, in writing, to be received by the administrative officer no later than 48 hours prior to the commencement of said meeting, specifying that the consent of the candidate had been obtained and the name of the seconder.

iv. Have a quorum when a majority of its members are present.

Article IX - Technical Advisors

1. Technical Advisors shall be particular persons recruited by a Committee from outside the Council to provide information or advice on priorities, projects and subjects.

Article X - Reports and Minutes

1. Reports, minutes and correspondence of Council shall be made available by the administrative officer to the public upon written request, excluding personnel items or items specifically restricted by the Board.

2. Minutes of all committees will be circulated to the regular members of those committees and to members of the Board. They will also be available to other persons at the Council Office or through the mail, upon written request, with the consent of the Chair of Council.

Article XI - Amendments

1. These Bylaws may be amended by a two-thirds vote of members present and voting at the Council meeting, provided that proposed amendments are mailed to members 14 days prior to the meeting.

2. The Standing Rules may be amended by the Council at any of its meetings by a two-thirds vote of members present and voting or by a majority vote with notice.

3. The Standing Rules may be amended by the Board with a two-thirds vote of members present and voting but such amendments shall have force and effect only until the next meeting of the Council unless approved at that meeting.

Article XII - Parliamentary Authority

1. The rules contained in the current edition of "Robert's Rules of Order Newly Revised" shall govern Council in all cases to which they are applicable and in which they are not inconsistent with the Council Bylaws or Standing Rules.

Standing Rules

1. The order of business for Council, Board or Committee meetings shall be at the discretion of its Chair.

2. The geographical boundaries of Council regions shall be those depicted in the accompanying map (Appendix 1). The Communities and Registered Trapline Districts included in each Northern District are listed in Appendix 2.

3 Members who represent organizations are encouraged, to inform the administrative officer of their organization's activities relevant to environmental matters.

4. Council's fiscal year shall coincide with that of the Department.

5. Expense claims shall be in accordance with rates provided for Manitoba government employees. Honorary and regular members residing within the perimeter highway surrounding Winnipeg shall not receive travelling expenses for council activities occurring within the city of Winnipeg.

6. Authority for Council expenditures shall be vested respectively in the Chair, if available; if not, Vice-Chair; if neither, Secretary, except for those within the administrative officer's limit of financial authority.

7. The administrative officer's limit of financial authority shall be determined by the Board.

8. The administrative officer's title shall be determined, from time to time, by the Board.

9. Briefs and resolutions

   i. received 14 days prior to a Council meeting shall be considered at that meeting;

   ii. received less than 14 days prior to a Council meeting may be considered at that meeting if a majority of the members wish to do so;

   iii. Sponsored by individuals, even if adopted at a Council meeting, will be referred to an appropriate committee for action.

10. Council business meetings are open to the public who may participate but shall not make motions or vote; they may present their environmental concerns under New Business but such presentations shall be subject to time being available. These concerns may be referred to a technical committee. The Chair shall inform the public of these rules.

11. The news media are encouraged to attend Council business meetings as observers and may be advised in advance of briefs to be presented. The Chair is responsible for regulating their activities so as not to interfere with the meeting. A table should be provided for their use.

12. The names and terms of reference of the Technical Committee shall be

i. Energy

a) To explore energy policies which would ensure a minimum of adverse environmental and social effects;

b) To monitor, research and inform the public on current energy issues which will have environmental implications;

c) To examine aspects of energy conservation which could be implemented by Manitobans, to inform Manitobans about energy conservation.

ii. Environmental Chemicals

a) To evaluate ways in which chemicals are used in or inadvertently discharged into the environment;

b) To recommend appropriate changes and safeguards in registration and control legislation and procedures.

iii. Environmental Education

a) To seek out and monitor programs of environmental education in Manitoba and elsewhere;

b) To promote the introduction of the best available courses in environmental education in Manitoba schools and teacher training programs;

c) To encourage inservice training relating to such courses.

iv. Environmental Impact Review

a) To identify industrial, commercial, and governmental projects which may have a significant impact on the physical, biological, and resource aspects of the natural and non-natural environment;

b) To evaluate environmental impact statements on such projects;

c) To evaluate environmental legislation and regulations.

v. Land Use

a) To monitor the implementation of existing land use policies and regulations;

b) To recommend means by which land use policy and practice may be improved.

vi. Solid Waste

a) To examine the capacity and effectiveness of present waste disposal techniques and facilities;

b) Determine future needs.

vii. Water

a) To examine the use of water resources, the

state of water quality, and the effectiveness of legislation dealing with water;

b) To recommend policies and control measures which will facilitate the conservation and beneficial use of water resources.

viii. Wildlife

a) To assess the quality of wildlife and wildlife habitat;

b) To evaluate and recommend policies and legislation relating to wildlife and wildlife habitat;